# PROVEN!
## BEST SPEED REACHABLE

# DUO ModulDry

- 100% FLEXIBLE
- DIFFERENT WAVE LENGTHS POSSIBLE
- HIGHEST SAFETY STANDARDS
- EASY HANDLING & SETTING

HIGHEST DRYING EFFICIENCY · FLEXIBLE APPLICATION ·

WE CREATE SOLUTIONS

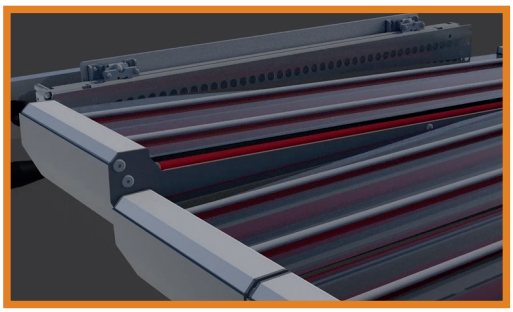
**DUO-TECHNIK**

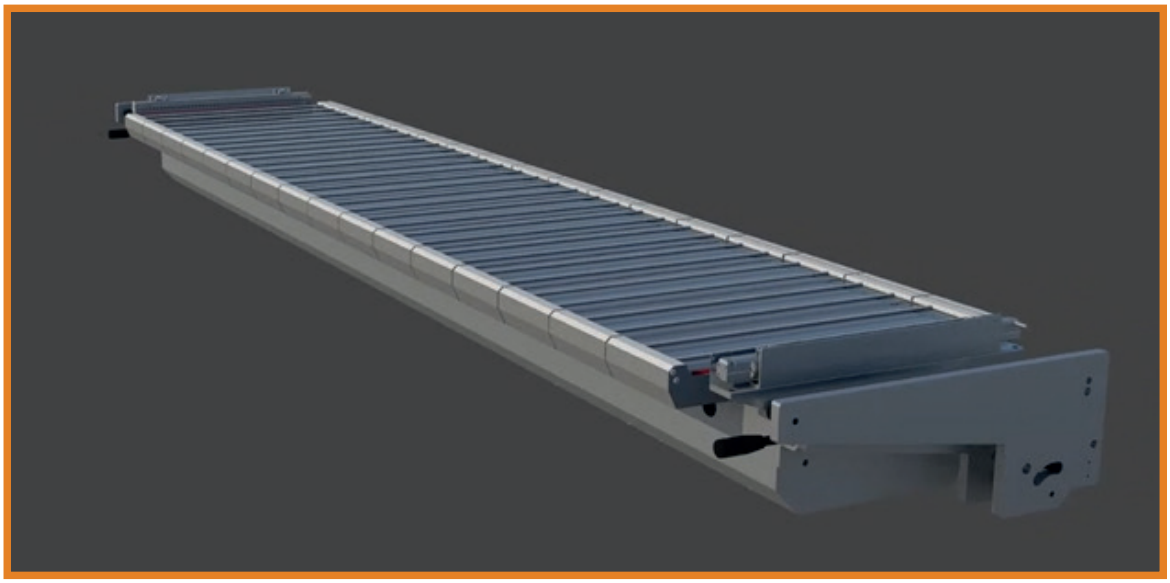
PRODUCTS FOR PRINT

# Design of Modul Dry

## // Design of the ModulDry

- The infrared dryer is built as a cassette system with 150 or 190 mm widths
- Each cassette is equipped with 4 or 5 emitters
- Through a special reflector plate, the rear radiation is reflected evenly on the drying surface
- The emitter area is protected by a glass plate and guide bars against the ingress of sheets, web and pieces of paper





## // Wave length, width and length can be selected flexibly:

- **Wave length:** NIR, Short wave, Medium wave
- **Cassette length:** Compact, Standard, Long

| | | 150 mm widths | | | 190 mm widths | | |
|---|---|---|---|---|---|---|---|
| | | Compact | Standard | Long | Compact | Standard | Long |
| Length in mm | | 310 | 355 | 555 | 310 | 355 | 555 |
| kW per cassette | NIR | 5,6 | 6,4 | 10,0 | 7,0 | 8,0 | 12,5 |
| | SW | 3,2 | 3,6 | 5,7 | 4,0 | 4,5 | 7,1 |
| | MIR | 2,9 | 3,3 | 5,2 | 3,6 | 4,1 | 6,5 |

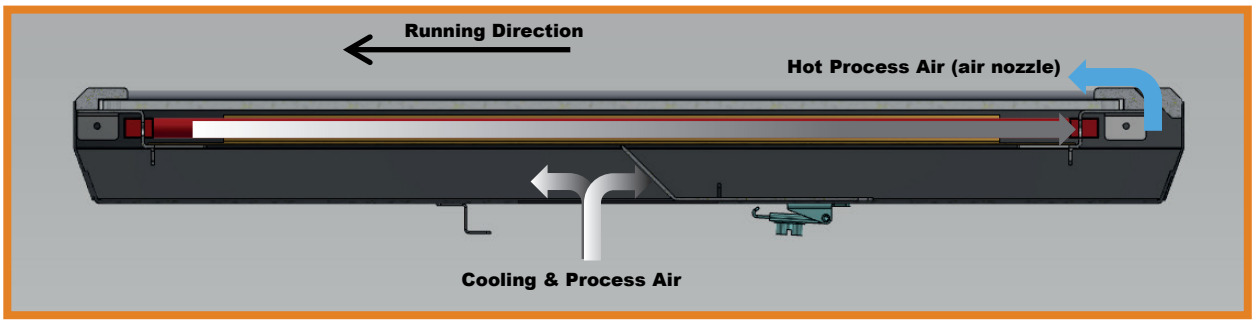
# Specialities of ModulDry

## // What makes ModulDry so effective?

- **Our Reflector** is made of a special material
  - It reflects light with a 95% reflection rate
  - It is long-term stable and scratch resistant
- **Our Protection glass** is made out of a special material
  - This gives a 10% higher infrared output compared to other systems
  - It has a transmission rate for light of 95% between 300-3000 µm wave length
  - It is temperature resistant up to 450 °C and has a high mechanical stability

✓ **Means our system has a 10% higher infrared output**

## // Our Air Management – that makes it different!




**The cooling & process air is directed through the emitter area and is fed into the drying area in the inlet area of the dryer cassette as hot process air to absorb the moisture.**

- The glass plate gets a temperature under 150 °C -> lower danger of fire
- The hot-air nozzle makes effective process air available and helps cleaning the surface of the dryer from dust

## // Your full known functionality - unique control

- Each cassette can be controlled individually according to the needs of the printing process
- The power of each drying module can be infinitely adjusted from 0-100%

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| OFF | 40% | 100% | OFF | OFF | OFF | 60% | OFF | OFF |

- Control of the dryer via modern touch panel (all machine interfaces possible)
- Real time emitter monitoring of each cassette. A failure is displayed and the failure cassette could be exchanged in a view seconds
- The configuration of the dryer modules can be saved per order and restored for following jobs

# Your full known functionality

## // DryControl - the modern way to save energy

- A pyrometer is placed in the middle of the drying unit
- The pyrometer measures the sheet or web temperature every 15 ms
- When a certain sheet temperature is reached, the dryer output is automatically reduced until a certain ***target temperature*** is reached
- The data's are saved and can be retrieved for the next order again

✓ **Energy savings between 25-40% are possible**

## // ModulDry can be equipped with all necessary equipment for safety

- ***SafetyGuard*** - A safety light curtain is looking sharp over the dryer element to detect board jams or pieces of paper on the dryer surface
- ***SentryCamHD*** - HD camera with monitor - the operator has all the dryer units in view
- ***SentryCamActiv*** - A thermal imaging camera monitors the entire dryer area - if the temperature is too high, the dryer and the printing press are actively stopped - maximum IR dryer safety
- ***PowerDropDown*** - The dryer unit swings automatically down when the machine stops to prevent sheets or pieces of paper from remaining on the surface
- ***SmartControl*** - Software Add On for storing dryer configuration job by job



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